



(12)

**EUROPEAN PATENT APPLICATION**

(21) Application number : **91310298.4**

(51) Int. Cl.<sup>5</sup> : **A61L 27/00, A61L 15/32**

(22) Date of filing : **07.11.91**

(30) Priority : **08.11.90 US 610542**

(43) Date of publication of application :  
**13.05.92 Bulletin 92/20**

(84) Designated Contracting States :  
**AT BE CH DE DK ES FR GB GR IT LI LU NL SE**

(88) Date of deferred publication of search report :  
**21.04.93 Bulletin 93/16**

(71) Applicant : **MATRIX PHARMACEUTICAL INC.**  
**1430 O'Brien Drive Suite H**  
**Menlo Park California 94025 (US)**

(72) Inventor : **Sierra, David H.**  
**723 Menlo Avenue, 2**  
**Menlo Park, California 94025 (US)**  
Inventor : **Luck, Edward E.**  
**216 Robin Way**  
**Menlo Park, California 94025 (US)**  
Inventor : **Brown, Dennis M.**  
**100 San Mateo Drive**  
**Menlo Park, California 94025 (US)**

(74) Representative : **Hardisty, David Robert et al**  
**BOULT, WADE & TENNANT 27 Farnival Street**  
**London EC4A 1PQ (GB)**

(54) **Fibrin/collagen membrane material for biomedical use.**

(57) Gel membranes are provided by gelling fibrinogen with thrombin by itself or in combination with gelation of collagen. After dehydration, the resulting membranes may be used as dressings, temporary skin grafts, or the like. The gels may be used without dehydration for drug delivery or tissue regeneration or growth inhibition.

**EP 0 485 210 A3**



European Patent  
Office

# EUROPEAN SEARCH REPORT

Application Number

EP 91 31 0298

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
X	US-A-4 837 379 (CRISPIN B. WEINBERG) * column 6, line 37 - line 68; claims; example 4 *	1-10	A61L27/00 A61L15/32
X	EP-A-0 166 263 (THE GREEN CROSS CORPORATION; MITSUBISHI MINING & CEMENT CO., LTD.) * claims; example 1 *	1,6,10	
X	EP-A-0 167 263 (LUCK, EDWARD E.; BROWN, DENNIS M.) * the whole document *	1,7	
P,X	WO-A-9 103 491 (ONCOGEN LIMITED PARTNERSHIP) * page 14, line 25 - line 22 * * page 19, line 10 - line 15 *	1,7,9,10	
X	PATENT ABSTRACTS OF JAPAN vol. 14, no. 356 (C-0745) 2 August 1990 & JP-A-21 29 224 (TERUMO CORP.) * abstract *	1,6	
A	EP-A-0 341 007 (PROJECT HAIR; MATRIX PHARMACEUTICAL INC.) * claims *	1-10	A61L A61K
A	EP-A-0 068 047 (SERAPHARM-MICHAEL STROETMANN) * claims *	1	
The present search report has been drawn up for all claims			
Place of search <b>THE HAGUE</b>		Date of completion of the search <b>23 FEBRUARY 1993</b>	Examiner <b>M. ESPINOSA</b>
<b>CATEGORY OF CITED DOCUMENTS</b> X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

EPO FORM 1500 (04/92) (P0401)